

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Cantor, et al.
Serial No.: 09/395,409
Conf. No.: 6005
Customer No. 24961
Filed: September 14, 1999
For: SOLID PHASE SEQUENCING OF BIOPOLYMERS
Art Unit: 1634
Examiner: Chakrabarti, Arun K.

CERTIFICATE OF MAILING BY "EXPRESS MAIL"

"Express Mail" Mailing Label No.:
EV 338078484 US
Date of Deposit: September 11, 2003

I hereby certify that this paper and the attached papers are being deposited with the United States Postal "Express Mail Post Office to Addressee" Service under 37 CFR §1.10 on the date indicated above and addressed to:

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450


Tim Chettiath

TRANSMITTAL LETTER

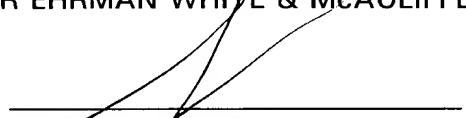
Commissioner for Patents
U.S. Patent and Trademark Office
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

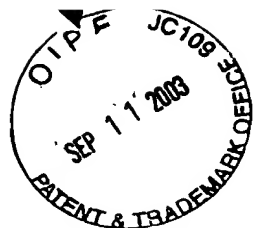
Transmitted herewith are a Supplemental Information Disclosure Statement, Forms PTO-1449 (2 pages), copies of cited references for filing in connection with the above-identified application. If no proper payment is enclosed herewith, the Commissioner is authorized to charge Deposit Account No. 50-1213, for the appropriate fee as stated below. A duplicate copy of this sheet is enclosed.

☒ The Commissioner is hereby authorized to charge any fee, including that submitted herewith if the attached check(s) is in the wrong amount or otherwise improper or missing, that may be due in connection with this and the attached papers, or with this application during its entire pendency to or to credit any overpayment to Deposit Account No. 50-1213.

Respectfully submitted,
HELLER EHRMAN WHITE & McAULIFFE LLP

By: 
Stephanie Seidman
Registration No. 33,779

Attorney Docket No. 25491-2403D
Address all correspondence to:
Stephanie L. Seidman, Esq.
HELLER EHRMAN WHITE & McAULIFFE LLP
4350 La Jolla Village Drive, 7th Floor
San Diego, CA 92122-1246
Telephone: 858 450-8400
Facsimile: 858 587-5360
email: sseidman@HEWM.com



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Cantor, *et al.*

Serial No.: 09/395,409

Conf. No.: 6005

Customer No. 24961

Filed: September 14, 1999

For: *SOLID PHASE SEQUENCING OF
BIOPOLYMERS*

Art Unit: 1634

Examiner: Chakrabarti, Arun K.

CERTIFICATE OF MAILING BY "EXPRESS MAIL"

"Express Mail" Mailing Label No.:

EV 338078484 US

Date of Deposit: September 11, 2003

I hereby certify that this paper and the attached papers are being deposited with the United States Postal "Express Mail Post Office to Addressee" Service under 37 CFR §1.10 on the date indicated above and addressed to:

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450


Tim Chettiath

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT
IN ACCORDANCE WITH 37 C.F.R. §§ 1.97-1.98**

Commissioner for Patents
P. O. Box 1450,
Alexandria, VA 22313-1450

Dear Sir:

This Supplemental Information Disclosure Statement is filed prior to receipt of a First Office Action on the Merits of a Request for Continued Examination of the above-captioned application. Thus, a fee for filing this statement should not be due. If, however, it is determined that a fee is due, any fees that may be due in connection with filing this paper may be charged to Deposit Account No. 50-1213.

In accordance with the duty of disclosure imposed by 37 C.F.R. §1.56 to inform the Patent Office of all references known by Applicant or Applicant's representative that may be material to the examination of the subject application, Applicant's representative hereby provides this Information Disclosure Statement that is prepared in accordance with 37 C.F.R. §§1.97-1.98. The Forms PTO-1449 (2 pages) and the cited references are provided herewith.

The cited documents, listed on Forms PTO-1449 and supplied herewith, are in the English language with the exception of item L. Item L, Japanese

U.S.S.N. 09/395,409
Cantor et al.
Supplemental IDS

patent 63-503007 is in the Japanese language and is provided with an English language equivalent, item M (International Patent Publication WO 87/04165), and a Derwent Abstract, item AA. Hence, in accordance with the requirements of 37 C.F.R. § 1.98, as amended effective March 16, 1992, no further explanation of the listed items is necessary.

Applicant also makes known to the Examiner the following U.S. and International applications, which are commonly owned and/or have one or more inventors in common.

<u>U.S.S.N.(App. No.)</u>	<u>Filing Date</u>	<u>Docket No.</u>
09/880,988	06/13/2001	2408 Allowed
10/428,254	05/01/03	2065
60/453,408	03/07/03	P2065
 <u>Int'l App. no.</u>	 <u>Filing Date</u>	 <u>Docket No.</u>
PCT/US03/13698	05/01/03	2065PC

Although these documents are made known to the Patent and Trademark Office in compliance with Applicant's duty of disclosure, such disclosure is not to be construed as an admission by Applicant or Applicant's representative that any of the references, singly or in any combination thereof, is effective as prior art against the subject application. In accordance with 37 C.F.R. §1.97(h), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. §1.56(b) exists.

* * *

U.S.S.N. 09/395,409
Cantor et al.
Supplemental IDS

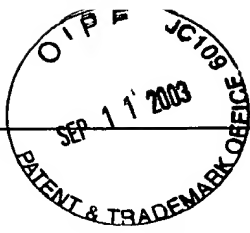
Applicant respectfully requests that the Examiner review the foregoing references and information and that they be made of record in the file history of the above-captioned application.

Respectfully submitted,
HELLER EHRMAN WHITE & MCAULIFFE LLP

By:


Stephanie L. Seidman
Registration No. 33, 779

Attorney Docket 25491-2403D
Address all correspondence to:
Stephanie L. Seidman
HELLER EHRMAN WHITE & McAULIFFE LLP
4350 La Jolla Village Drive, 7th Floor
San Diego, California 92122-1246
Telephone: (858) 450-8400
Facsimile: (858) 587-5360
E-mail: sseidman@HEWM.com



FORM PTO-1449 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 25491-2403D	SERIAL NO. 09/395,409	CONFIRM NO. 6005
	APPLICANT Cantor <i>et al.</i>	CUSTOMER NO. 24961	
	FILING DATE 09/14/99	GROUP 1634	

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUB CLASS	FILING DATE
	A	4	7	7	5	6	1	9	10/16/84	Urdea	435	6	10/04/88
	B	4	9	3	5	3	5	7	02/05/86	Szybalski	435	91	06/19/90
	C	5	4	3	6	1	4	3	07/25/95	Hyman	435	91.2	12/23/92
	D	5	6	2	2	8	2	4	04/22/97	Köster <i>et al.</i>	435	6	02/10/95
	E	5	6	9	1	1	4	1	11/25/97	Köster	435	6	06/06/95
	F	6	0	2	2	6	8	8	02/08/00	Jurinke <i>et al.</i>	435	6	05/13/96
	G	6	2	3	2	0	7	6	05/15/01	Schultz	435	6	02/04/00
	H	6	2	2	5	0	6	1	05/01/01	Becker <i>et al.</i>	435	6	03/10/99
	I	6	2	6	8	1	3	1	07/31/01	Kang <i>et al.</i>	435	6	12/15/97
	J	6	4	8	5	9	1	3	11/26/02	Becker <i>et al.</i>	435	6	10/02/00

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	Sub Class	Translation	
	K	0	0	5	6	4	4	6	09/28/00	PCT			Yes	No
	L	6	3	5	0	3	0	07	11/02/88	JP				X
	M	8	7	0	4	1	6	5	07/16/87	PCT				
	N	9	3	0	8	3	0	5	04/29/93	PCT				
	O	9	4	1	6	0	9	0	07/21/94	PCT				
	P	9	4	2	1	8	1	1	09/29/94	PCT				
	Q	9	6	1	4	4	0	6	05/17/96	PCT				
	R	9	8	2	0	0	2	0	05/14/98	PCT				
	S	9	9	3	1	2	7	8	06/24/99	PCT				
	T	9	9	1	4	3	6	2	03/25/99	PCT				

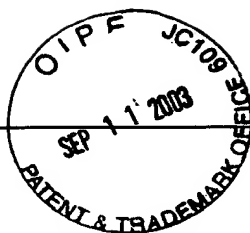
X* English language equivalent provided

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



FORM PTO-1449 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 25491-2403D	SERIAL NO. 09/395,409	CONFIRM NO. 6005
	APPLICANT Cantor <i>et al.</i>	CUSTOMER NO. 24961	
	FILING DATE 09/14/99	GROUP 1634	

	U	Benner <i>et al.</i> , "Identification of Denatured Double-stranded DNA by Matrix-assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry", <i>Rapid Commu. Mass Spec.</i> , <u>9</u> :537-540 (1995)
	V	Benner <i>et al.</i> , "DNA Base-Pair Substitutions Detected in Double-Stranded DNA With Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry", <i>Eur. Mass Spectrum.</i> , <u>1</u> : 479-485 (1995)
	W	Brenner, "DNA fingerprinting by sampled sequencing", <i>Proc. Natl. Acad. Sci. USA</i> 86:8902-8906 (1989).
	X	Cantor <i>et al.</i> , Sequence-directed DNA manipulation for enhanced mapping and sequencing, <i>Human Genome Program, US Department of Energy, DOE Human Genome Program Contractor-Grantee Workshop IV</i> , (1994)
	Y	Ch'ang <i>et al.</i> , "Detection of $\Delta F508$ Mutation of the cystic Fibrosis Gene by Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry", <i>Rapid Comm. in Mass Spectrom.</i> , <u>9</u> :772-774, (1995)
	Z	Cosstick <i>et al.</i> , "Synthesis and Properties of dithymidine phosphate analogues containing 3'-thiothymidine", <i>Nucl. Acid Res.</i> , <u>18</u> (4):829-835 (1990)
	AA	Derwent Abstract Dialog File No. 351 Acces. No. 7209274 for Japanese patent JP 63603007, published 11/02/88.
	AB	Drmanac <i>et al.</i> , Laboratory methods: reliable hybridization of oligonucleotides as short as six nucleotides, <i>DNA & Cell Biology</i> 9(7):527-534 (1990)
	AC	Köster <i>et al.</i> , "A strategy for rapid and efficient DNA sequencing by mass spectrometry," <i>Nature Biotechnology</i> <u>14</u> : 1123-1128 (1996)
	AD	Khrapko <i>et al.</i> , "An oligonucleotide hybridization approach to DNA sequencing," <i>FEBS Letters</i> <u>256</u> (1-2): 118-122 (1989)
	AE	Liu <i>et al.</i> , "Use of a Nitrocellulose Film Substrate in Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry for DNA Mapping and Screening", <i>Anal. Chem.</i> , <u>67</u> :3482-3490, (1995)
	AF	Szybalski, "Universal restriction endonucleases: designing novel cleavage specificities by combining adapter oligodeoxynucleotide and enzyme moieties", <i>Gene</i> , <u>40</u> :169-173 (1985)
	AG	Tang <i>et al.</i> , "Matrix-assisted Laser Desorption/Ionization of Restriction Enzyme-digested DNA", <i>Rapid Comm. Mass Spec.</i> , <u>8</u> (2):183-186 (1994)
	AH	Wu <i>et al.</i> , "Time-of-Flight Mass Spectrometry of Underivatized Single-Stranded DNA Oligomers by Matrix-Assisted Laser Desorption", <i>Anal. Chem.</i> , 66:1637-1645 (1994)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.